

REMARKS

FIG. 1 has been amended; Claim 10 has been amended; new Claims 17-22 have been added; no claims have been cancelled; claims 1-22 are before the examiner.

For purposes herein, the paragraphs referred to are those as numbered in the corresponding U.S. Patent Publication No. 2007/0209473 A1.

New Claims 17-22 have been added to further clarify the presently claimed invention. Support for Claim 17 may be found at numbered paragraphs [0006], [0007], and [0008].

Support for Claims 18, 19, 20, and 21 may be found in numbered paragraphs [0010], [0018], [0024], and [0029].

Support for Claim 22 may be found in numbered paragraph [0021].

Support for the amendment to FIG. 1 may be found in numbered paragraph [0008].

No new matter has been added.

Objection to Drawings Under 37 CFR 1.83(a)

The drawings have been objected to under 37 CFR 1.83(a) for failing to show every feature of the invention specified in the claims. Claim 7 recites: “[a] piston rod assembly... wherein each component end and the first/second end provide a ball and socket.” FIG. 1 has been amended to further clarify and show the ball and socket arrangement disclosed in numbered paragraph [0008] and in Claim 7 as originally filed. New element 80 Ball and Socket has been added to the FIG. 1 and to numbered paragraph [0021] in the specification.

Rejection Under 35 U.S.C. §112, second paragraph

The Office Action alleges Claim 10 to be indefinite for reciting “each stem extends from one clamping member through an aperture in an adjacent clamping member”. Applicant has amended Claim 10 to recite the limitations previously recited in Claim 9 from which Claim 10 did originally depend. Claim 10 was further amended to depend from Claim 3 to provide correct antecedent basis for the limitation “adjacent clamping member.” Support

for this amendment may be found in the claims as originally filed and in the Figures. Removal of the rejection is respectfully requested.

Rejection Under 35 U.S.C. §103

Claims 1-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over applicant's earlier patent, U.S. Patent No. 5,904,071 to Kennedy et al. (hereinafter "Kennedy".) Applicant respectfully disagrees.

Applicant recites a piston rod assembly for coupling between a power end and a fluid end of a high pressure reciprocating pump, the assembly comprising one or more clamping members arranged relative to a rod axis between the power end and the fluid end, each member having a first end adapted to grip the power end component, and a second end adapted to grip the fluid end component, and at least one member including one or more tensioning devices, wherein said tensioning device comprises a piston to provide a load in said tensioning device orthogonal to said rod axis and thereby secure said components against release.

As Applicant discloses:

"[t]he principal advantage of the present invention is that by applying a force orthogonally to the rod axis a greater securing force is provided to clamp the assembly to the component ends. This also dispenses with the need to provide apertures through the end components for locking pins"

(US2007/0209473, [0026], emphasis added.)

In contrast, Kennedy is generally directed to a piston rod assembly comprising a power end component, a fluid end component and a connector wherein each of the piston rod and the power end are secured to the coupling by a coupling pin which extends through a radial aperture in each end of the connector through the respective component attached thereto. Kennedy thus discloses the exact type of connector which the presently claimed invention improves upon, i.e., a connector which provides apertures through the end components for locking pins. Kennedy fails to disclose or suggest a piston rod assembly comprising a tensioning device which provides a load in a tensioning device orthogonal to the

rod axis to secure the components against release. Kennedy thus fails to disclose or suggest all of the limitations recited by the presently claimed invention.

The Action has based the finding of obviousness in concert with the holding in *In re Japikse*, 86 USPQ 70 (hereinafter “Japikse”) implying that the presently claimed invention amounts to an obvious variant achieved through a mere rearrangement of parts which involves only routine skill in the art. Japikse involved a finding of obviousness for an embodiment of a hydraulic power press wherein the only difference between the claimed invention and the prior art was the relocation of a switch within the device. In both the invention and the prior art, the switch was actuated in essentially the same way and accomplished essentially the same outcome. These are not the facts of the presently claimed invention in view of the cited prior art.

Applicant recites a piston rod assembly for coupling a power end and a fluid end of a high pressure reciprocating pump comprising a device that provides a load between one or more clamping members which is orthogonal to the axis of the piston rod and the power end to secure the components against relief. In contrast, Kennedy provides a coupling in which attachment of the piston rod to the coupling and attachment of the power end to the coupling is provided through a locking pin arranged orthogonal to the rod axis disposed through the coupling and the end of the component attached to the coupling. The Kennedy locking pin does not provide orthogonal loading.

Applicant’s presently claimed invention does not secure the various components in the same way as disclosed in Kennedy, nor does the presently claimed invention require a locking pin to secure the various components together. In fact, as discussed above, the presently claimed invention expressly teaches away from utilization of a locking pin in view of the many issues presented by use of a locking pin. Instead, the presently claimed invention secures the various components using a tensioning device which provides a load between clamping members which is orthogonal to the rod axis such that the clamping members secure the various components. The cited prior art thus fails to disclose or suggest all of the limitations recited by the presently claimed invention. In addition, the instant application actually teaches away from the cited prior art. As such, the cited prior art cannot reasonably

be interpreted to obviate the presently claimed invention. Removal of the rejection is respectfully requested.

The claims, as amended, are now in condition for allowance. Applicants respectfully solicit a prompt notice of allowability. In the alternative, Applicants invite the Office to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Office's satisfaction.

Respectfully submitted,

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